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Thought for this Issue

"We cannot continue to have an increasing number of VPDs...and not have a catastrophe...."
Ben Castellano, Manager
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Airport Operators: The time has come...only you can prevent VPDs!

Do you know who has the authority for promulgating and enforcing the rules/regulations for ground operations at *your* airport?

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Who Needs Driver Training?
OR
How you can help prevent having A Nut Behind the Wheel!

With the increasing number of surface incidents that are associated with Vehicle/Pedestrian Deviations (VPDs), airports are being asked to review and evaluate how and when they permit access to various areas on the airport, especially the movement area. This is an appropriate time to talk about driver training programs.

Where should they begin? Of what should that training consist? Who should receive driver training? And what kind of training is appropriate?

Driver Training Programs prepare airport employees for the airport environment and for operating on the airport's surface. This principle should influence the way in which driver training programs are structured. The set of variables comprising a driver training program will be unique to a specific airport, because they address specific needs. However, there are things that all airports have in common.

Who can predict where a driver may go on an airport, whether with or without a permit? With or without an assigned purpose? With or without a full/clear understanding of the task? Because

there are situations that cannot be predicted, it is better to lay the ground work for understanding aviation operations, groundwork that can help prevent accidents, than to assume that no operation will be inadvertent.

Having said that, let's take a look at the basics of driver training. While a one-size-fits-all driver training program is no longer sufficient to accommodate the types of driving that take place in the airport environment, there are some common ingredients of any good training program, and some topics may be developed to more depth for those drivers who will have access to the movement area.

Airport familiarization
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Airport Familiarization. If a program does not begin with an airport orientation, it does not begin to instill in a driver respect for the aviation operations that take place airside. Whether a driver is going to have access to the movement area on the airport or something other than that, the most effective part of an airport driver training program is that which educates personnel about aviation and airport operations.

There is status to knowing what an airport is all about. Airport managers should take advantage of this incentive. It may take some class time, but people who work on an airport should know the compass points, the magnetic compass designations of the runways at their airport, and the basics of marking, lighting, and signs. This is an investment in people. We all give credence to the saying that people are a business' most important asset. Airport personnel *are* important. Instilling a sense of purpose and loyalty can pay off when a well trained airport employee picks up FOD or reports an anomaly that prevents a mishap.

Aircraft Operations. When aircraft and ground vehicles operate in the same area, there is a need for specific rules to ensure safety. Providing airport employees with information on the performance and operational requirements of aircraft as well as their limitations, especially when they are taxiing, can help ground vehicle operators understand why they must remain clear, give the right of way, or be aware of the effects of jet blast, e.g.

Air Traffic Control function on the Airport. ATC, an integral part of many airport environments, plays a critical role on the airport, exercising responsibilities that affect life and property. An understanding of the users' responsibilities, especially as they relate to one another on the airport surface, is an absolute necessity. Adherence to procedures involving clearances is probably the most important of these, but many other activities by vehicle operators on the airport also require alertness and good judgment. And *all* of this depends on communication!

Pilot/Airport Operations/ATC terminology. Communications on an airport, especially by traffic with different missions and destinations must be precise. The Pilot/Controller Glossary has been developed to address the ways by which communications are handled on the airport. The intent of

establishing a set of words and phrases is obvious. Meaning can and must be conveyed precisely and unambiguously. Familiarity with the Glossary, especially with those words and phrases appropriate to vehicle operations on the airport should be part of the training program for all airport personnel permitted airside, whether or not they have authorization for entry into movement area.

Equipment Limitations. The safe operation of vehicles on airports requires a knowledge of the operating requirements and limitations of the various pieces of equipment. This is not unlike those of aircraft. CG location, CG shifts, and turning radii are as important to baggage cart and fueling vehicle operators as they are to any aircraft. Failure to instill a respect for the equipment airport personnel operate can be costly, both in terms of property damage, time lost on the job, equipment out of service, and, of course, personal injury.

Non-Towered Airports

At non-towered airports, efforts to avoid surface incidents also depend on effective training. In many respects, the non-towered airport has more potential for surface incidents. Many of them are unreported; thus, the extent of the risk that is being created has not been quantified. Against this potential, however, are the facts that most drivers on non-towered airports are responsible operators, who, as tenants or employees, have a vested interest in maintaining a safe environment on their airports. Airport owners/managers still have a responsibility to ensure that these people know the rules for operating vehicles on the airport. And there should be rules.

In general, airport owners/ operators/ managers should ascertain the limits of their authority. In most cases, the ability to promulgate rules/regulations for operating on the airport resides in these offices.

Testing

The proof of any program is in how it provides for an evaluation of its own effectiveness of its training concepts and implementation. At large airports, testing may consist of a written form and a practical demonstration. At airports where only a written test is administered, attention to how information is presented is very important. Candidates for permits with access to the movement area should be encouraged to ask questions, and opportunities to interact with a person knowledgeable about the airport should be provided. A period of on-the-job-training can be the answer to this.

A number of airports will be considering driver training simulators, as these are now on the market. These simulators are airport specific, include testing modules, and are arrayed for the various types of operations, such as limited access, full access, and no access to movement area. The exposure they give to the actual airport environment, whether it is airside or landside, is a significant factor in their effectiveness as teaching devices.

Penalties

Infractions of the rules or regulations have to be addressed, or else rules and regulations are meaningless. Airports certificated under 14 CFR part 139 are *required* to inform their personnel of "the consequences of noncompliance." At some airports, the local, county, or state authorities may exercise jurisdiction. At others, the airport authority has sole responsibility for promulgating *and* enforcing the rules and regulations. At some airports, infractions are followed by remedial training for the first offense.

At other airports, penalties are incurred immediately. This may, in some cases, include temporary loss of driving privileges. Each airport owner/ operator has to evaluate the most effective means of maintaining compliance.

Summary. The first time an airport has a surface incident, there should be at least a review of the driver training program. An airport with no surface incidents should not rest on its laurels. Only vigilance and recurrent training on a periodic basis will keep that airport in the winning column. More than one surface incident? It's time to take a good, hard look at the effectiveness of the program and see what needs improvement. Maybe there's something missing or something that needs revamping. Maybe something needs to be added. Only a review will tell. It might even be advisable to ask the nut behind the wheel, "What's wrong?"

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14CFR part 139 Airports and VPDs

At airports certificated under 14 CFR part 139, there are requirements governing ground operations under .329. First among these is a requirement to "limit access to movement areas and safety areas only to those ground vehicles necessary for airport operations." There are several ways to do this. Peripheral roads that allow vehicles to remain clear of the airport altogether are, of course, preferable, but, where transiting the movement area is necessary, specific roadways can be marked as vehicle lanes.

For vehicle operations in the movement area of an airport where there is an Air Traffic Control Tower (ATCT), communications training for vehicle operators should be a significant part of the program. This portion of the training has become a focal point, as communications have been identified as a leading reason for a number of surface incidents. Procedures and vocabulary for communications on airports with ATCT are so important that an entire class session and a practicum (a practical demonstration of what the student has learned) are recommended.

Because travelling on the airport is quite different than travel anywhere else, operators of trucks and equipment that come onto the airport for specific purposes (construction, insect spraying, or other maintenance duties performed by non-airport personnel) should be escorted or provided with explicit instructions on the use of their access to the airport. This applies equally to buses and other shuttle-type vehicles that may bring in charter groups to meet aircraft and to personal vehicles that have access to locations on the airport.
See the Quarterly Vignettes.

Control of vehicle access and of vehicles on the airport is a preeminent safety issue. The airport's responsibility is to exercise this control effectively and consistently and to ensure that others with access to the airside recognize the same serious nature of operating on the airport. Moreover, part 139 requires that this responsibility, when compromised, be addressed as the "consequences of noncompliance." This means a system of penalties for infractions of the vehicle operating rules or regulations on that airport.
Part 139 also includes a provision that records of accidents and incidents that occur on the movement area should be available to the Administrator on request.

At towered airports, most of these records are initiated by the ATCT and therefore are reported on a nationwide system. The airport operator's responsibility lies in addressing the infraction in terms of responsibilities under part 139 and in adjudicating the infraction according to the penalties that have been established. At non- towered certificated airports maintenance of these records is the responsibility of the airport operator. A review of these records should be conducted periodically to see if the driver training program is responsive to the needs of the airport personnel. Addressing these deficiencies, whether they be in the driver training program or

the attitude of personnel toward their airport jobs is a matter with which the airport must contend. A surface incident is a symptom of a problem. Addressing the problem is the only common sense thing to do, because Airports cannot wish away VPDs! Ignoring problems doesn't make them go away.

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The following are surface incidents reported in the Administrator's Daily Alert Bulletin. They are representative of the incidents being tracked at FAA National Headquarters.

31 October 0730E. . 14 CFR part 139 Airport: Tug towing B737 entered taxiway A without clearance. Air carrier on arrival was stopped on taxiway A to avoid loss of separation.

30 October 1247E. . 14 CFR part 139 Airport: Pepsi vehicle entered runway 36 without authorization conflicting with air carrier departing same runway. Closest proximity 70 feet horizontal.

27 October 1315E. 14 CFR part 139 Airport: Four buses entered the movement rea and ramp without communications. No conflicts resulted.

07 October 1635E. 14 CFR part 139 Airport: Airport van crossed runway 29 without clearance. Five aircraft in sequence, first on 3-mile final.

09 October 0816C. . 14 CFR part 139 Airport: Unidentified construction vehicle crossed taxiway C without authorization.

18 January 2001 1552C. vehicle entered runway 4 without clearance. Aircraft on final .5 mile sent around. Index C part 139 airport

15 January 2001 1147C. Fuel truck crossed runway 33 without clearance, conflicting with Beech BE 40 on .5 mile final. Runway incursion. Aircraft sent around.

23 January 2001 1009P. Unidentified vehicle crossed approach end of runway 21 at intersection and drove along taxiway without authorization. No conflicts reported.

Runway Incursion Statistics CY 2001 to date versus CY 2000.

CY 1-01

Month	OE	PD	V/PD	MISC	Total
Jan	4	9	3		**16**
Feb					
Mar					
Total	4	9	3		**16**

Yr to date	OE	PD	V/PD		Total
CY 01	4	9	3		**16**

CY 1-00

Month	OE	PD	V/PD	MISC	Total
Jan	2	15	6	1	**24**
Feb	5	12	7	0	**24**
Mar	11	22	3	0	**36**
Total	18	49	16	1	**84**

CY 1-00	OE	PD	V/PD		Total
2000	18	49	16	1	**84**

Runway Incursion statistics CY 2000 to date versus CY 1999

CY 1-00

	OE	PD	V/PD	MISC	Total
Total	18	49	16	1	**84**

CY 1-99

	OE	PD	V/PD	Total
Total	18	34	15	**67**

CY 2-00

MONTH	OE	PD	V/PD	MISC	TOTAL
Total	26	70	20	0	**116**

CY 2-99

MONTH	OE	PD	V/PD	TOTAL
Total	19	45	15	**79**

CY 3-00

MONTH	OE	PD	V/PD	MISC	TOTAL
Jul	6	29	7		**42**
Aug	10	28	10		**48**
Sep	5	18	10		**33**
Total	21	75	27		**123**

CY 3-99

MONTH	OE	PD	V/PD	TOTAL
Jul	7	23	9	**39**
Aug	7	13	3	**23**
Sep	8	17	8	**33**
Total	22	53	20	**95**

CY 4-00

MONTH	OE	PD	V/PD	MISC	TOTAL
Oct	9	27	5		**41**
Nov	8	15	10		**33**
Dec	6	20	6		**32**
Total	23	62	21		**106**

CY4-99

MONTH	OE	PD	V/PD	TOTAL
Oct	7	13	4	**24**
Nov	7	15	3	**25**
Dec	5	22	4	**31**
Total	19	50	11	**80**

Yr to date	OE	PD	V/PD	MISC	TOTAL
CY 2000	88	256	84	1	**429**

Yr to date	OE	PD	V/PD	TOTAL
1999	78	182	61	**321**

CY00 numbers are preliminary and are subject to changed based on final investigative reports.

Note**: The final reports have been validated for CY 1-00 & 2-00.**